STATE OF MARYLAND
DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

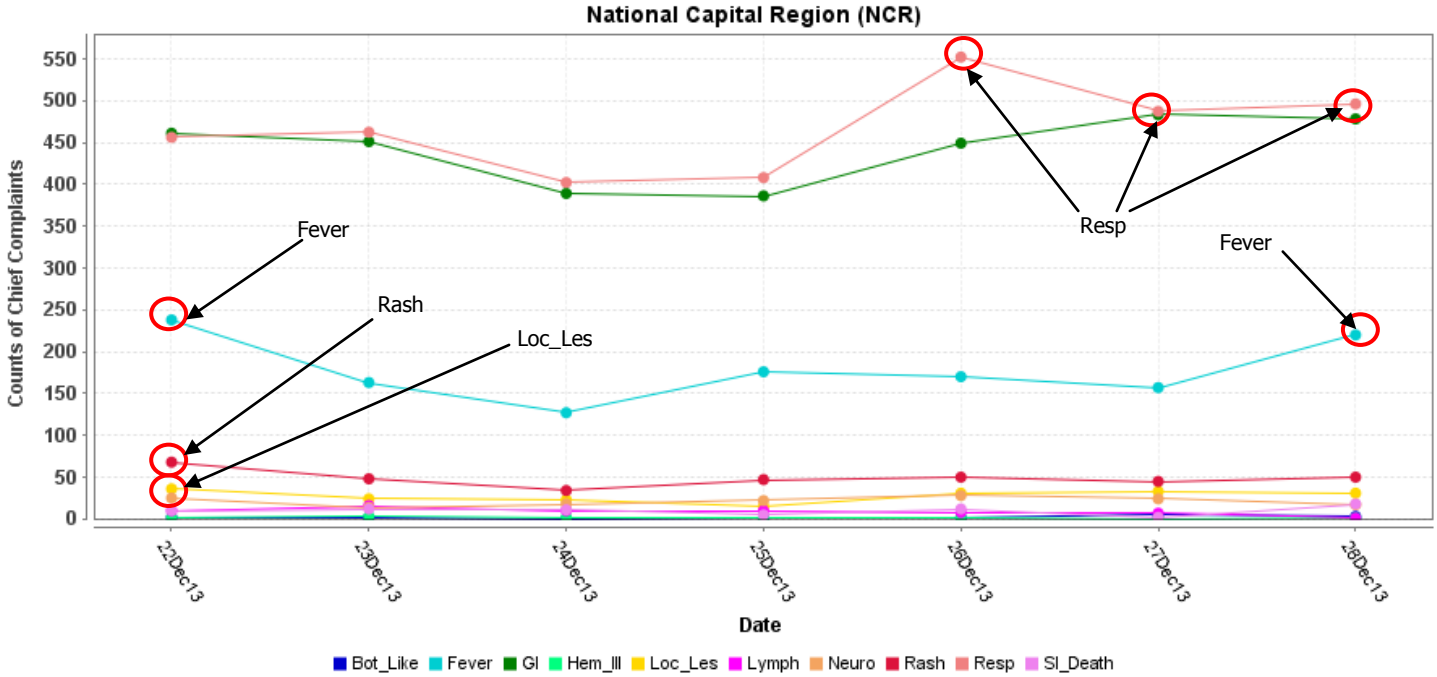
January 3, 2014

Public Health & Emergency Preparedness Bulletin: # 2013:52
Reporting for the week ending 12/28/13 (MMWR Week #52)

CURRENT HOMELAND SECURITY THREAT LEVELS

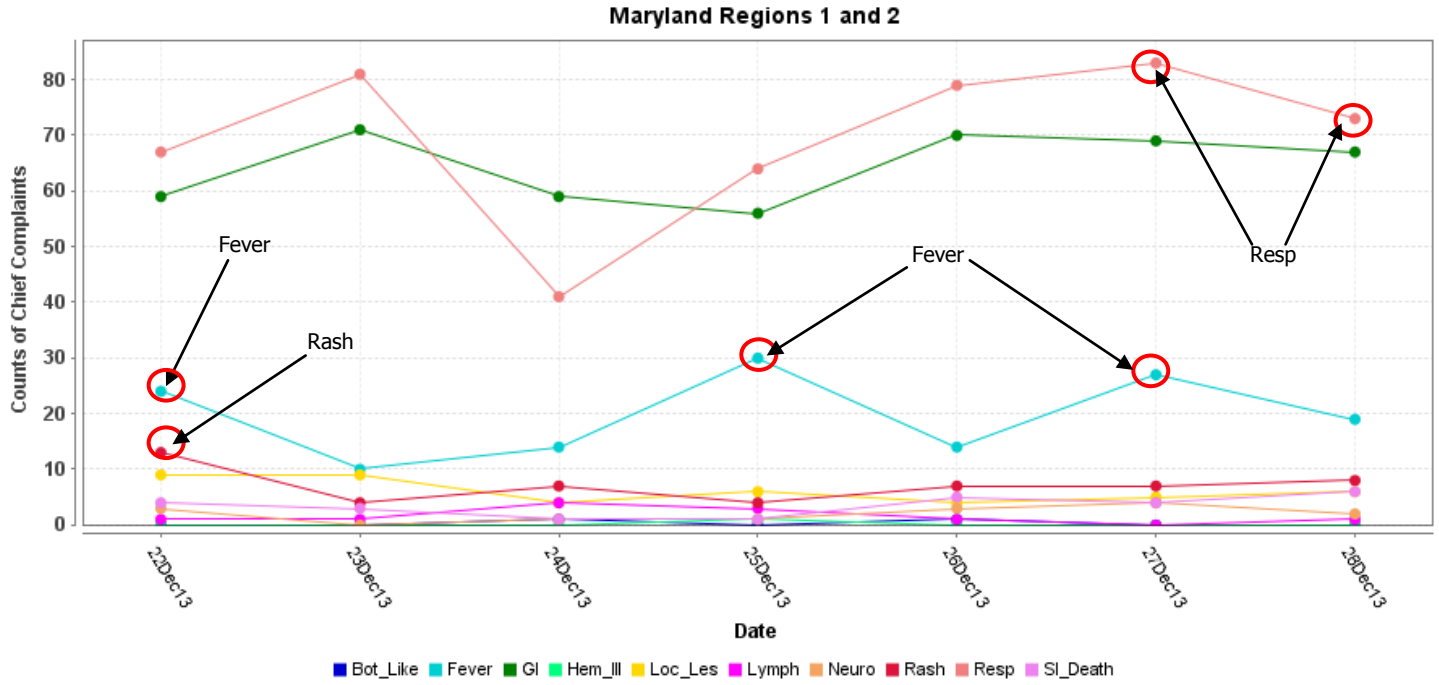
National: **No Active Alerts**
Maryland: **Level Four (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

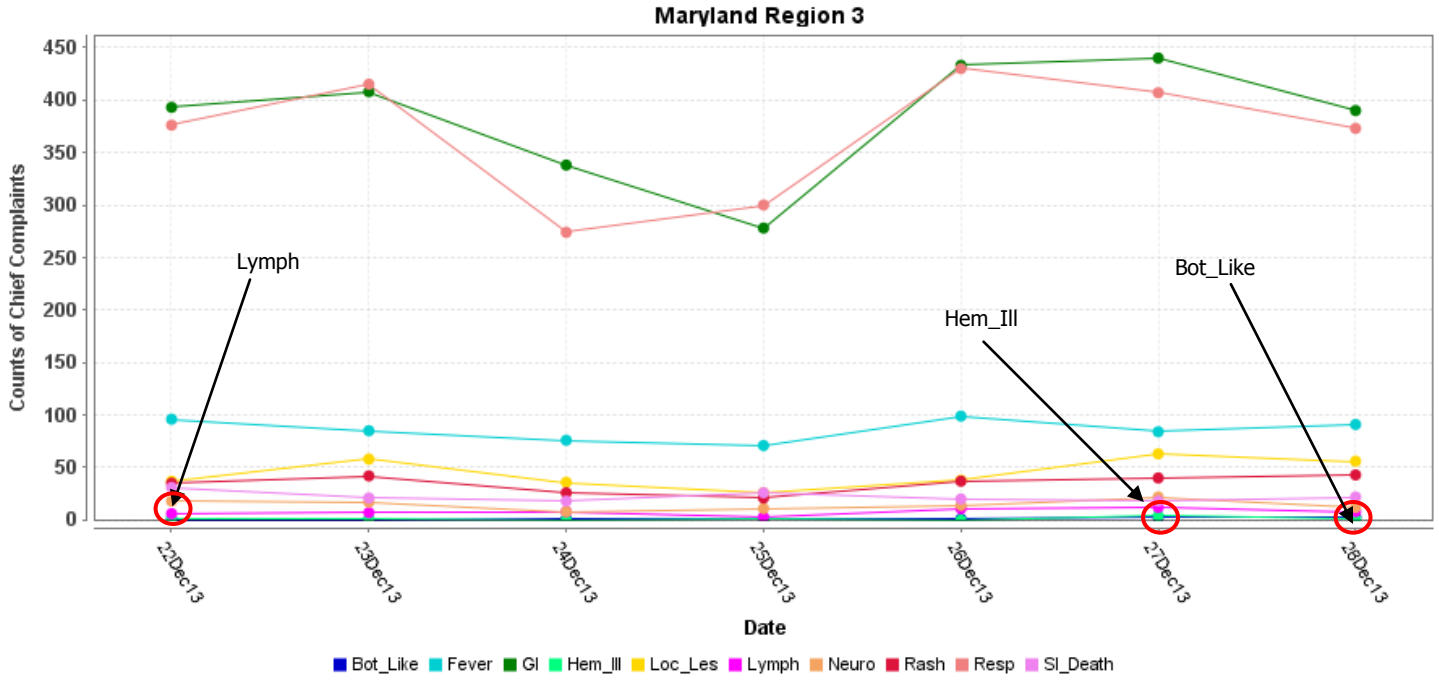


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

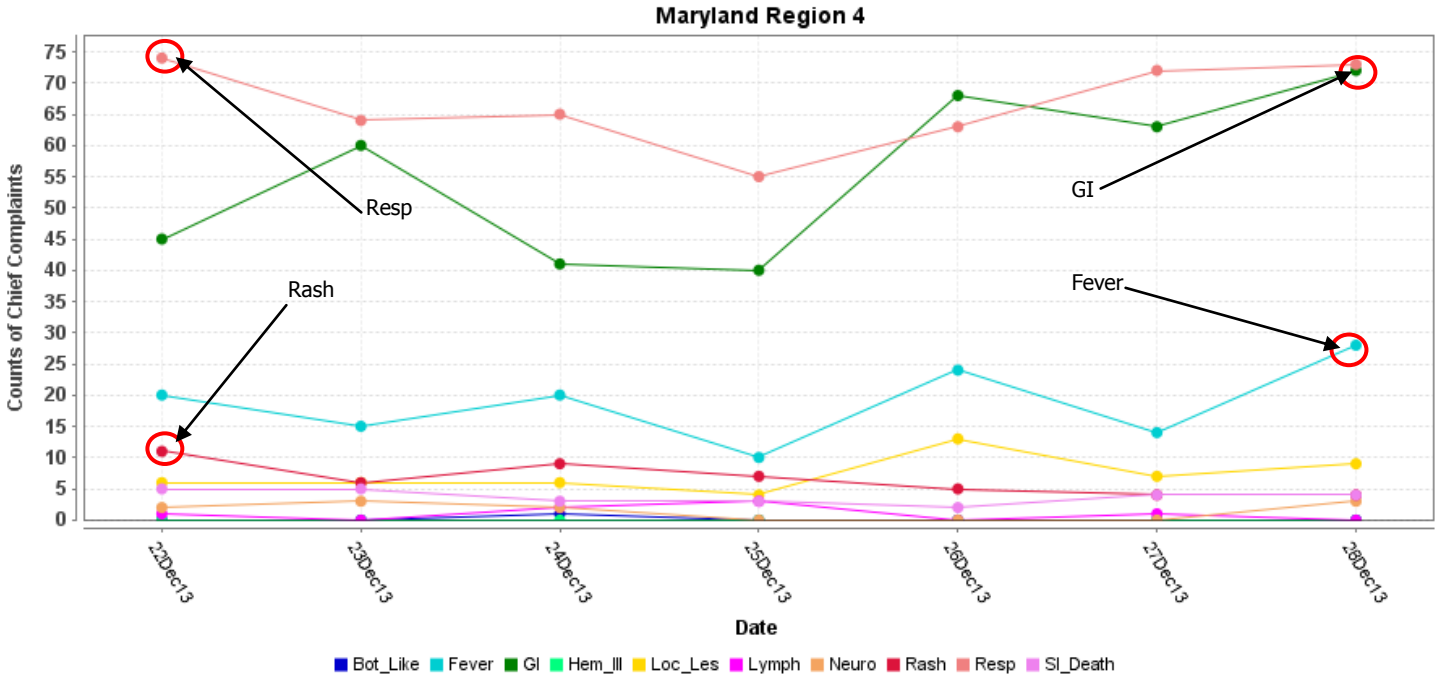
MARYLAND ESSENCE:



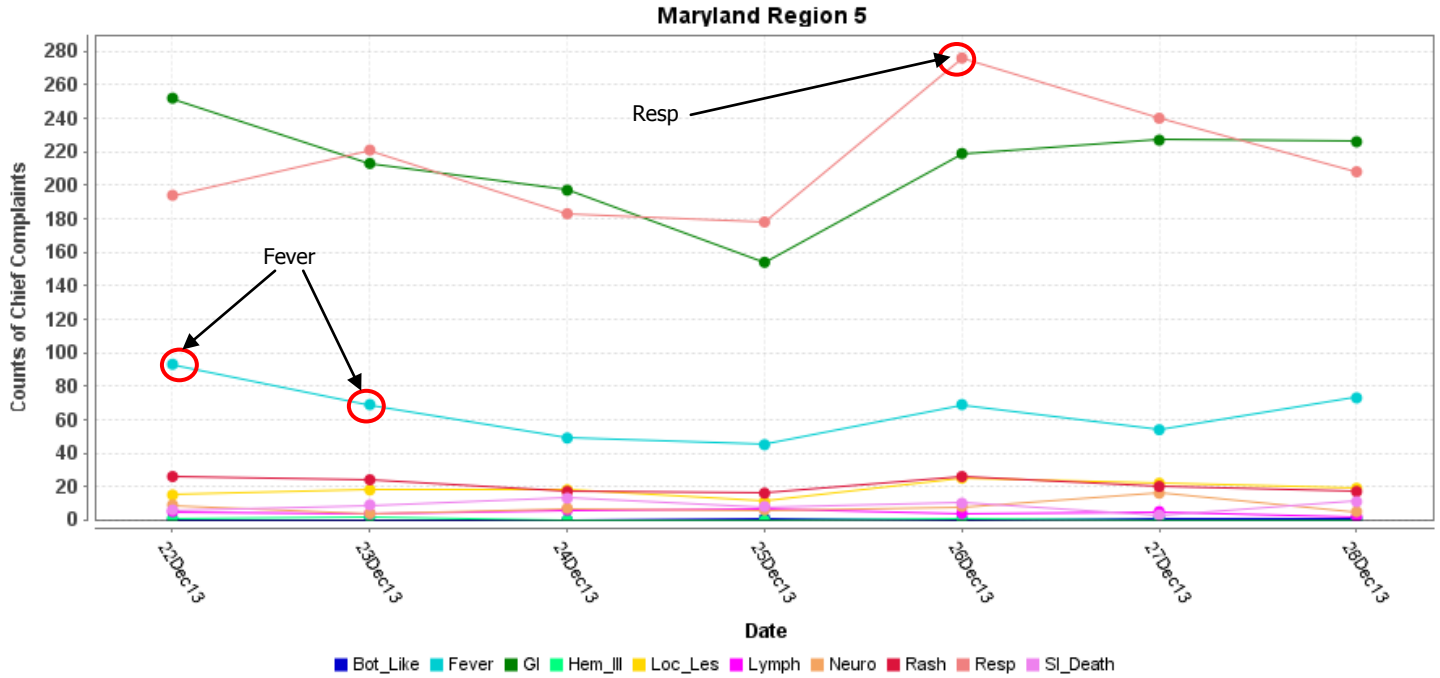
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



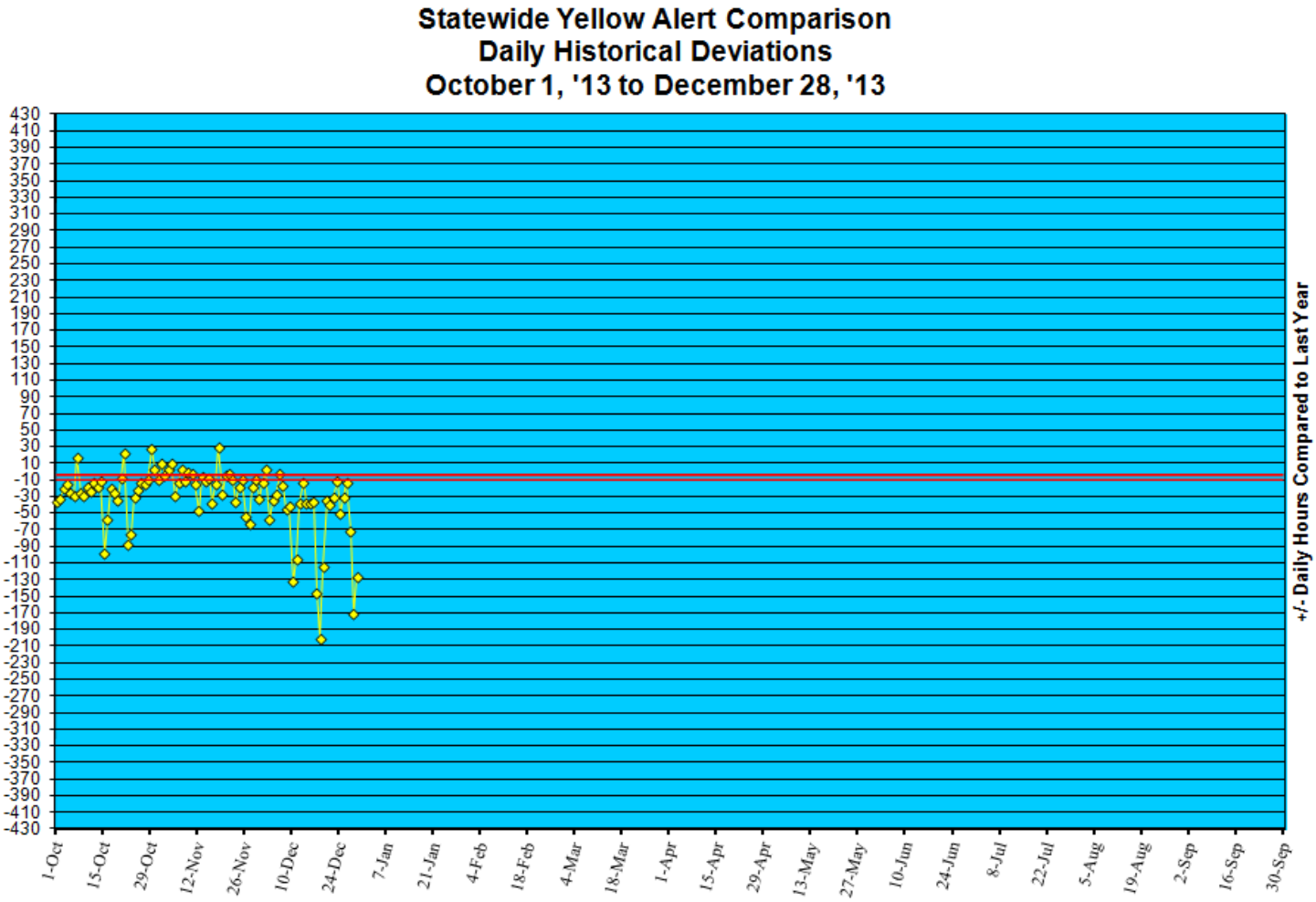
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/13.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in November 2013 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (December 22 - December 28, 2013):	4	0
Prior week (December 15 - December 21, 2013):	8	0
Week#52, 2012 (December 24 – December 30, 2012):	2	0

2 outbreaks were reported to DHMH during MMWR Week 52 (December 22 - December 28, 2013)

1 Foodborne Outbreak
1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Private Home

1 Respiratory Illness Outbreak
1 outbreak of Influenza in an Assisted Living Facility

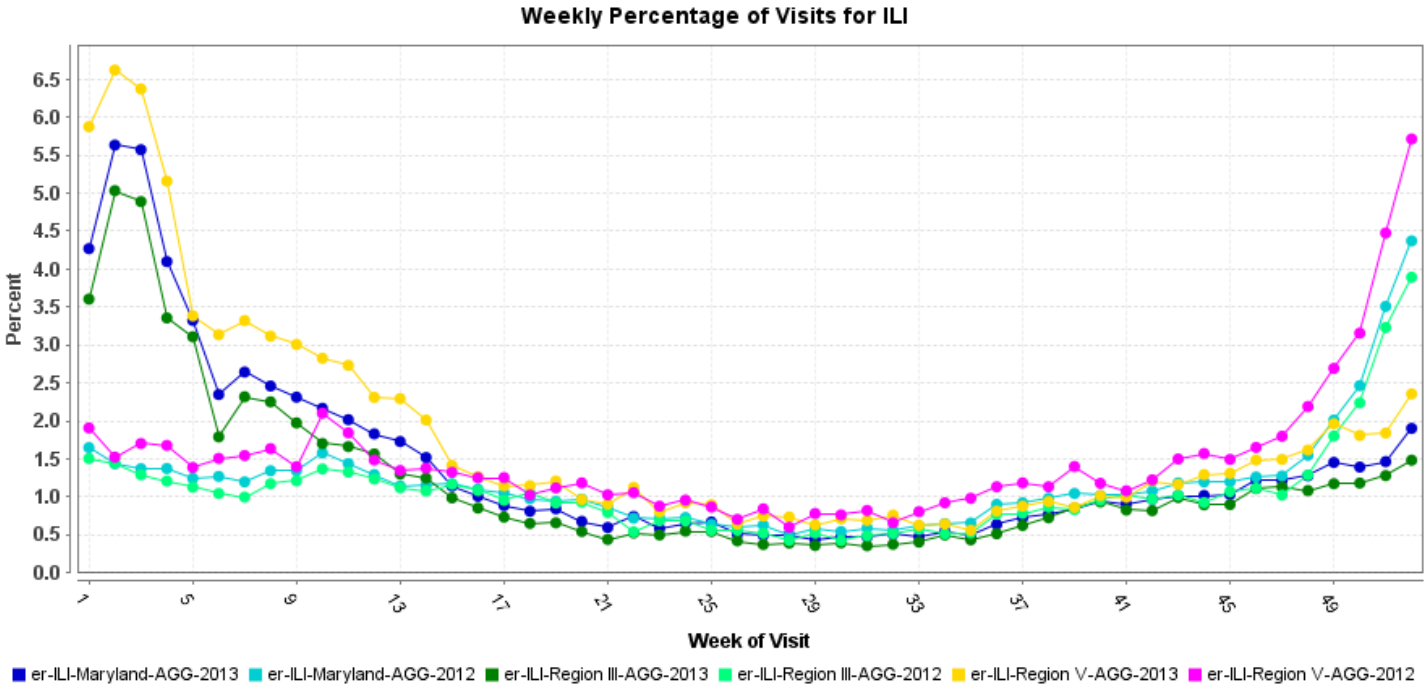
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 52 was: Regional Spread with Minimal Intensity

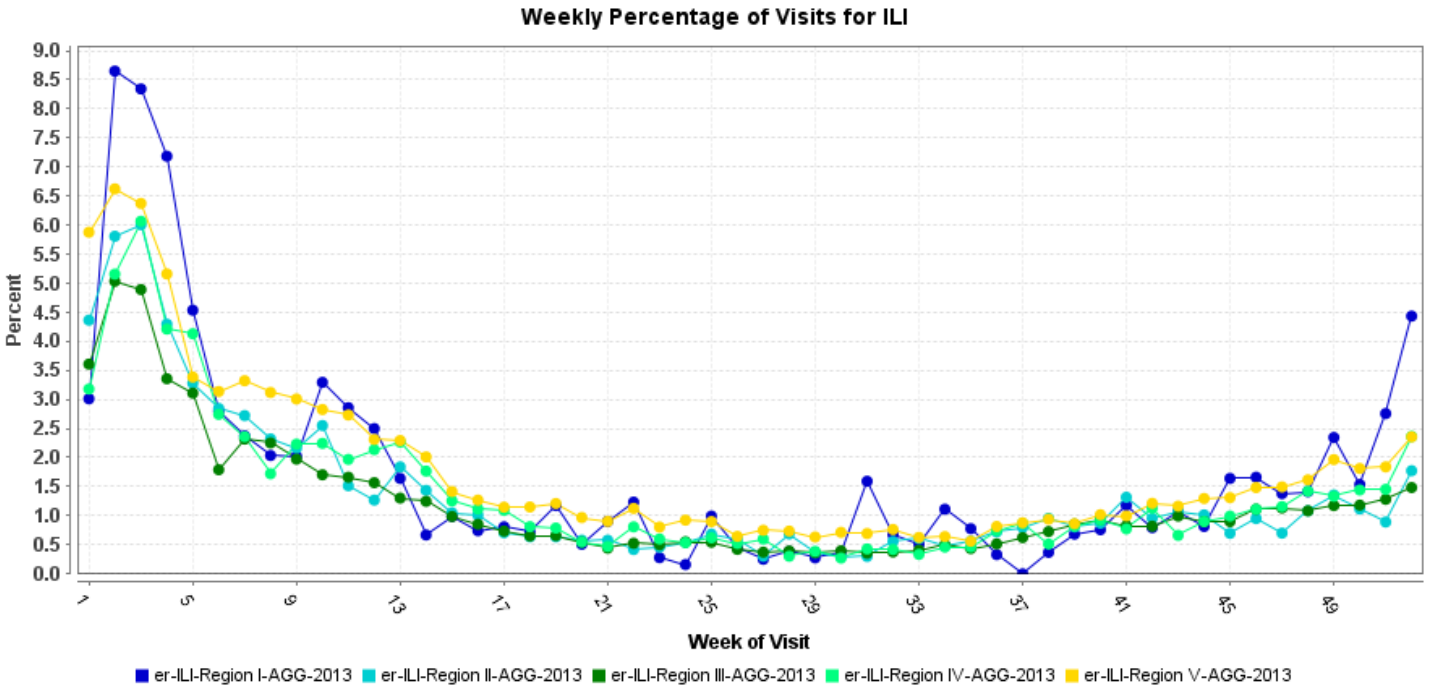
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



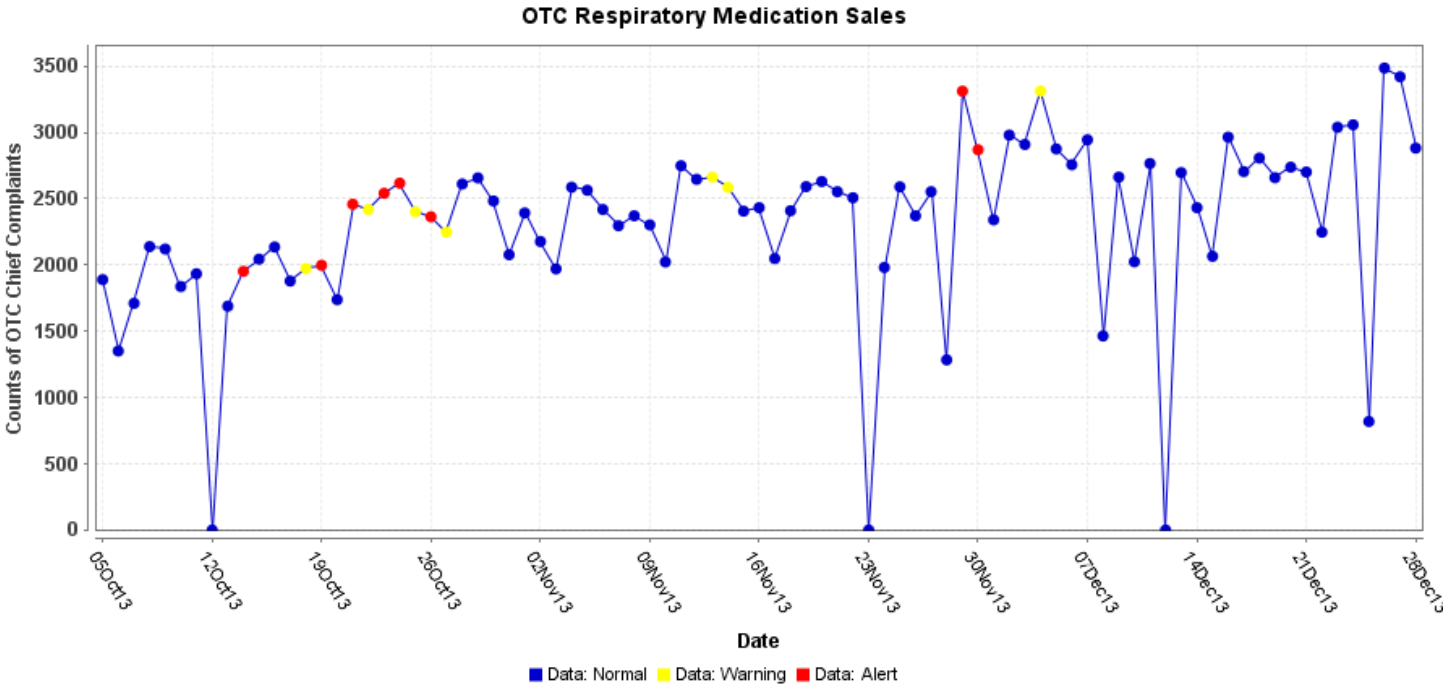
* Includes 2012 and 2013 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2013 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of December 10, 2013, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 648, of which 384 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA, HUMAN (H7N9): An 80-year-old man infected with the H7N9 bird flu virus has died in Hong Kong, the government said on Thursday [26 Dec 2013], in the 1st such death in the city after the virus surfaced in early December. The man, the 2nd person in Hong Kong to be diagnosed with the virus strain, lived in the southern Chinese city of Shenzhen [Guangdong Province] and had eaten poultry there, media reported. The H7N9 strain was 1st reported in humans in February [2013] in mainland China, and has infected at least 139 people in China, Taiwan and Hong Kong, killing more than 40. Experts say there is no evidence of any easy or sustained human-to-human transmission of H7N9, and so far all people who came into contact with the man had tested negative for the strain, authorities said.

NATIONAL DISEASE REPORTS*

TICK-BORNE ENCEPHALITIS VIRUS (MASSACHUSETTS, MAINE): 26 December 2013, Disease trackers in Massachusetts and Maine are investigating 2 cases of a rare and severe tick-borne illness, providing new evidence of the suffering that can be inflicted by ticks and prompting warnings that the threat can persist into December. Investigators suspect that the infections were caused by Powassan virus or a related virus, which can spawn headaches, vomiting, confusion, seizures, memory loss, and long-term neurological problems in those who survive the infection. The virus is believed to be fatal in 10 to 15 percent of those who are exposed. Blood tests show that a Maine woman who died last week was infected with the virus. Health officials said it appears the woman, from mid-coast Maine, had not been traveling and likely was infected locally. (Viral Encephalitis is listed in Category B on the CDC List of Critical Biological Agents) *non-suspect case

INTERNATIONAL DISEASE REPORTS*

CHOLERA (INDIA): 27 December 2013, Deputy Commissioner and District Magistrate N. Jayaram on Tue 17 Dec 2013 declared Sultanpur village -- under the Noginahal Primary Health Centre (PHC) of Hukkeri taluk -- as cholera-affected. He directed officials of the Health Department to take up measures to prevent the spread of the disease to adjoining areas. Mr. Jayaram said that 36 cases were reported from the village. All patients were being treated at the PHC and other private health centres. He told the Health Department officials to set up teams of doctors to provide treatment. He urged the residents of Sultanpur and adjoining areas to maintain cleanliness and to drink boiled water. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

JAPANESE ENCEPHALITIS AND OTHER (INDIA): 27 December 2013, The menace of encephalitis continues unabated in eastern Uttar Pradesh as 3 more children succumbed to the disease at BRD Medical College Hospital, official sources said on Wednesday [25 Dec 2013]. With these deaths, which took place during the last 24 hours, the toll has reached 640 this year [2013]. Sources in the office of Additional Director (Health) said all 3 deaths occurred at BRD Medical College Hospital. The deceased hailed one each from Gorakhpur, Kushinagar [both in Uttar Pradesh state] and an adjacent area in Bihar [state], they said, adding, the patients were admitted to the medical college hospital during the last 24 hours while 46 patients are undergoing treatment. Sources said that this year [2013] as many as 3008 encephalitis patients were admitted to different government hospitals of eastern region, of which 640 died. The disease causes death in 33 per cent of cases, while over 50 per cent of patients suffer from various forms of mental and physical disabilities, they said. The disease is caused due to mosquito bite [that transmutes Japanese encephalitis virus] or consumption of contaminated water. Central and state agencies are continuously conducting awareness campaigns on sanitation and safe drinking water. The official said 3 rounds of vaccination against Japanese encephalitis (JE) for children up to 15 years have also been conducted, adding that the move has [caused JE cases to go down by 15 per cent]. (Viral Encephalitis is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

MERS-COV (SAUDI ARABIA): 23 December 2013, The Middle East respiratory syndrome coronavirus (MERS-CoV) that has gripped Saudi Arabia since September 2012 has claimed another life, bringing to 56 its latest death tally in the kingdom. The latest victim was a 73-year-old, chronically ill man, the kingdom's Health Ministry reported over the weekend. The man died in a Riyadh hospital. 3 new cases of MERS-CoV were likewise reported. They include 2 foreign nationals working in healthcare who got exposed to patients suffering from the virus as well as a Saudi man who is confined in intensive care and is chronically ill. To date, there are now 169 MERS-CoV cases confirmed. These are mainly located in Saudi Arabia and the United Arab Emirates. MERS-CoV is a cousin of the severe acute respiratory syndrome (SARS), which made a global outbreak in 2003, infecting more than 8000 and killing some 800 people. But compared to SARS, the MERS-CoV is considered less-transmissible but nonetheless deadlier. Symptoms of the disease include fever, cough, chills, pneumonia, and the need for respiratory support, according to the US Centers for Disease Control. The MERS-CoV first emerged in the Middle East on September 2012 in a Qatari man who had recently traveled to Saudi Arabia. "CDC recognizes the potential for the virus to spread further and cause more cases and clusters globally, including in the United States," the Center said on its website. Cases have been identified in Jordan, Saudi Arabia, the United Arab Emirates, Qatar, Oman, Kuwait, France, Germany, the United Kingdom, Italy, Spain, and Tunisia (Emerging Infectious Diseases are listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable